## 6 Difference Quotient as an Average Rate of Change

1. Find the difference quotient of the function shown below:

$$y = 5x - 6$$

2. Find the difference quotient of the function shown below:

$$y = 2x^2$$

3. Find the difference quotient of the function shown below:

$$y = x^3 - 2x^2 + 4$$

- 4. What is the difference quotient for the function  $y = \frac{1}{x}$ ?
- 5. What is the difference quotient for the function  $y = \sqrt{x} + 5$ ?